

● 10/507067

DT09 Rec'd PCT/PTO 08 SEP 2004

APPENDIX E

International Search Report

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 2003946-0018	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/US 03/ 07377	International filing date (day/month/year) 07/03/2003	(Earliest) Priority Date (day/month/year) 08/03/2002
Applicant EISAI CO. LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/07377

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D313/00 A61K31/335 A61P29/00 C07D225/06 C07D407/12
C07D491/04 C07D267/00 C07D493/04 A61K31/36 A61K31/395
A61P11/06 A61P17/06 A61P17/16 A61P19/04 A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 606 044 A (SANDOZ LTD ;SANDOZ AG (DE); SANDOZ AG (AT)) 13 July 1994 (1994-07-13) cited in the application Claims 1-4,6,15-18; Formulas (I) and (I')	1-37,43, 44, 47-118
X	WO 96 13259 A (COR THERAPEUTICS INC) 9 May 1996 (1996-05-09) cited in the application Claims 1-22; formula (I); Table 1 ex. 1, 5, 14 and tables 2-3; p. 9 especially l. 6-7; p. 12, last paragraph-p. 13, 1st paragraph; p. 14, last paragraph --- -/--	1-42, 47-83,85

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

17 June 2003

Date of mailing of the international search report

04/07/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rivat, C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/07377

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61P37/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 38674 A (KASTELIC TANIA ;CHENEVAL DOMINIQUE (CA); NOVATION PHARMACEUTICALS) 6 July 2000 (2000-07-06) cited in the application Claim 8; Formulas (I), (III), (VII) and (VIII); p. 5, last paragraph-p. 6, l. 2	1-44, 47-118
X	AGAMUSTA T. ET AL.: "Revised Structure and Stereochemistry of Hypothemycin" CHEM. PHARM. BULL., vol. 41, no. 2, 1993, pages 373-375, XP001152923 Compounds 1 and 3	1-42, 47-83, 85

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

17 June 2003

Date of mailing of the international search report

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rivat, C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/07377

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>TAKEHANA K. ET AL.: "A Radicicol-Related Macrocyclic Nonan ketide Compound, Antibiotic LL-Z1640-2, Inhibits the JNK/p38 Pathways in Signal-Specific Manner"</p> <p>BIOCHEM. BIOPHYS. RES. COMM., vol. 257, 1999, pages 19-23, XP002244484</p> <p>Compounds 87-250904-F1 and LL-Z1640-2</p> <p>---</p>	<p>1-42, 47-83,85</p>
P,X	<p>WO 02 48136 A (TSUCHIYA MASAYUKI ;CHUGAI PHARMACEUTICAL CO LTD (JP); OHTOMO TOSHI)</p> <p>20 June 2002 (2002-06-20)</p> <p>Compounds of formula (1), (4), (8), (9), (11)</p> <p>-----</p>	<p>1-45, 47-122</p>

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 1-126 relate to compounds of formula (I) as well as to derivatives thereof which term encompasses an extremely large number of possible compounds. In fact, the expression "pharmaceutically acceptable derivatives" contain so many options and possible variations that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the whole claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear and concise namely the compounds of formula (I) exclusively.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/07377

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 84-126 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/07377

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0606044	A	13-07-1994	AU 5211293 A	16-06-1994
			CA 2110553 A1	05-06-1994
			CN 1095417 A	23-11-1994
			CZ 9302614 A3	13-07-1994
			EP 0606044 A1	13-07-1994
			FI 935409 A	05-06-1994
			HU 65910 A2	28-07-1994
			JP 6228122 A	16-08-1994
			MX 9307608 A1	31-01-1995
			NO 934372 A	06-06-1994
			NZ 250344 A	26-10-1995
			PL 301281 A1	13-06-1994
			SK 135493 A3	10-08-1994
			ZA 9309088 A	05-06-1995
WO 9613259	A	09-05-1996	US 5795910 A	18-08-1998
			AT 210439 T	15-12-2001
			AU 706621 B2	17-06-1999
			AU 4278996 A	23-05-1996
			CA 2203757 A1	09-05-1996
			CN 1165481 A	19-11-1997
			DE 69524628 D1	24-01-2002
			DE 69524628 T2	08-08-2002
			DK 788356 T3	18-03-2002
			EP 0788356 A2	13-08-1997
			ES 2170172 T3	01-08-2002
			JP 10508024 T	04-08-1998
			PT 788356 T	28-06-2002
			TW 467743 B	11-12-2001
			WO 9613259 A2	09-05-1996
			US 5728726 A	17-03-1998
			US 5674892 A	07-10-1997
WO 0038674	A	06-07-2000	AU 1852100 A	31-07-2000
			CA 2356622 A1	06-07-2000
			WO 0038674 A1	06-07-2000
			EP 1140069 A1	10-10-2001
			JP 2002533389 T	08-10-2002
WO 0248136	A	20-06-2002	AU 2262802 A	24-06-2002
			WO 0248136 A1	20-06-2002